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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,574	04/14/2004	Alcino Resende De Almeida	3089-6391US	6551

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SALT LAKE CITY, UT 84110

EXAMINER
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MICHALSKY, GERALD A

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/824,574

Applicant(s)

DE ALMEIDA, ALCINO RESENDE

Examiner

Gerald A. Michalsky

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the orifices in a direction tangential to the internal surface of the body of the mandrel as specified in claims 3, 5, 6, 10, 11, and 12; the "distinct geometrical shapes" specified in claims 7, 9, 10, and 11; tangential injection orifices combined with centrally directed injection orifices as specified in claims 6 and 11; and a plurality of injection orifices combined with a "superior longitudinal opening" as specified in claims 8, 9, 10, and 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Art Unit: 3753

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The disclosure is objected to because of the following informalities: In line 2 of paragraphs 00121 and 00122, line 1 of paragraph 00124, and line 3 of paragraph 00126, "28" should be --50--. In paragraph 00125, line 1, "26" should be --50--. Numeral 29, mentioned on paragraph 00130, line 3, cannot be found on Figure 5.

Appropriate correction is required.

4. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Brazil on 15 April 2003. It is noted, however, that applicant has not filed a certified copy of the Brazilian application as required by 35 U.S.C. 119(b).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3753

6. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Surles. Orifices 42 of Surles are read as a "plurality of injection orifices".

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surles in view of Lamb. Claim 2 is considered met by Surles except that Surles discloses a plurality of injection orifices 42 rather than a single injection orifice. It would have been obvious in view of single injection orifice 14 of Lamb to substitute a single injection orifice for the plurality of injection orifices 42 of Surles since a single injection orifice would function approximately equivalently. To utilize a tangential orifice as specified in claim 3 would have been obvious to a person of ordinary skill in the art at the time the invention was made, since applicant asserts no criticality in this feature.

9. Claims 8/2 and 8/3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surles in view of Lamb as applied to claims 2 and 3 above, and further in view of Pringle. These claims are considered met as above except for a superior longitudinal opening for injection. It would have been obvious in view of Pringle to provide a superior longitudinal opening for injection in order to provide for additional injection flow.

10. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surles. These claims are considered met by Surles except for tangential injection orifices and distinct geometrical shapes. It would have been obvious to a person of

Art Unit: 3753

ordinary skill in the art at the time the invention was made to provide tangential injection orifices and distinct geometrical shapes since applicant asserts no criticality in these features.

11. Claims 8/1, 8/4, 8/5, 8/6, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surles in view of Pringle. These claims are considered met as above except for a superior longitudinal opening for injection. Pringle is applied as above.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 4-11 are further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 2 of claim 4, line 2 of claim 5, lines 2 and 4 of claim 6, line 2 of claim 7, lines 2 and 3 of claim 9, lines 2 and 4 of claim 10, and lines 2, 4, and 6 of claim 11, "28" should be --50--. The notation, "4.", at the end of claim 7 is indefinite. Numeral "29", in line 3 of claim 8, line 4 of claim 9, line 6 of claim 10, and line 8 of claim 11, is not present on the drawing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald A. Michalsky whose telephone number is (571) 272-4917. The examiner can normally be reached on M-F 5:30 AM - 2 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gerald A. Michalsky  
Primary Examiner  
Art Unit 3753

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